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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,911	01/30/2003	Gregory Murphy	5838-03101	7869
<div>7590 08/23/2007</div> <div>Eric B. Meyertons Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C. P.O. Box 398 Austin, TX 78767-0398</div>				
			<div>EXAMINER</div> <div>SHAHRESTANI, NASIR</div>	
			<div>ART UNIT</div> <div>3737</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>08/23/2007</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/713,911

Applicant(s)

MURPHY ET AL.

Examiner

Nasir Shahrestani

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 303-307, 309-311 and 495-503 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 303-307, 309-311, 495-503 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/22/2005;
11/012004; 08/02/2004; 7/29/2004 .

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 303-307, 309-311, 495-503 are rejected under 35 U.S.C. 102(b) as being anticipated by Ryals et al. (U.S. 5,803,914).

Regarding claims 303, 304; Ryals et al. teach a method of assessing wall thickness of human heart tissue (fig. 14)

Comprising: means for displaying a first image of a myocardial structure during diastolic phase of a cardiac cycle and means for displaying a second image of the structure during systolic phase of a cardiac cycle; means for selecting a region of interest –ROI- of the first image and ROI of the second image and computing ratios and wall movement factors for individual sections of the myocardial structure based on ROI (col. 5 lines 50-66).

Regarding claim 305, Ryals et al. further teach that in order to assess wall thickness using adjacent arc sections, suitable contrast is used (col. 42 lines 41-58).

Regarding claim 306, Ryals et al. also teach using two images to create a three-dimensional representation (col. 12 lines 30-48) using processor system (element 120).

Regarding claim 309, Ryals et al. further teach the creation of a report comprising a second image of heart tissue wherein at least a portion is 3-D and divided based on contrast of sections (fig. 10).

Regarding claim 310, Ryals et al. also teach the computer system (fig. 1) to assess a viability using wall thickness (col. 4 lines 64-67 through col. 5 lines 1-5).

Regarding claim 311, Ryals et al. teach a system configured to assess wall thickness (display 105) of a human heart tissue, comprising: a CPU (abstract); and a system memory coupled to the CPU (col. 6 line 42); wherein one or more computer programs are executable to provide at least on image of heart tissue from a human heart (fig. 6); to a computer system and assess wall thickness of the heart (fig. 14) by using the computer system to assess a contrast between two section in at least one image (col. 6 lines 31-36).

Regarding claim 495-497, 499-503, Ryals et al. teaches means for displaying a first image of a myocardial structure during diastolic phase of a cardiac cycle; means for displaying a second image of the myocardial structure during systolic phase of a cardiac cycle; means for selecting a region of interest of the first image and also for selecting a region of interest of the second image; means for computing perfusion ration and wall movement factors as well as assessing wall thickness. (See col. 5 lines 50-67). Furthermore, Ryals et al. teach creatin a report comprising at least a third image of human tissue (combination of first an second images), wherein at least a portion appears as 3-D (fig. 10) and further divided into parts as described above.

Regarding claim 498, Ryals et al. teach wherein the region of interest of the first image and the region of interest of the second image are each divided into a plurality of individual sections (col. 6 lines 2-4).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nasir Shahrestani whose telephone number is 571-270-1031.


The examiner can normally be reached on Mon.-Thurs: 7:30-5:00, 2nd Friday: 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


NSS

8/14/2007


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